

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently amended) A method for use with a speech recognition device for improving speech recognition performance, said method comprising:
generating, from speech data for which speech recognition is to be performed, a plurality of pieces of speech data whose start positions of non-speech regions differ;
performing speech recognition using each of said pieces of speech data to obtain a plurality of recognized results; and
identifying ~~the~~ a most numerous recognized result from among the plurality of obtained recognized results.
2. (Currently amended) A method according to Claim 1, wherein, by sequentially shifting the start position of said non-speech region from ~~the~~ a start position of the speech region back to a position preceding by a predetermined time, a plurality of pieces of speech data whose start positions of non-speech regions differ are generated from said speech data for which speech recognition is to be performed.
3. (Original) A method according to Claim 2, wherein the information of the start position of said speech region is provided by a speech recognition engine which performs said speech recognition.
4. (Original) A method according to Claim 3, wherein the information of the start position of said speech region is obtained by performing a recognition process on the first speech data by using said speech recognition engine, or is obtained by averaging speech data for several pieces of data from the start which have been subjected to the recognition process.
5. (Currently amended) A method according to Claim 1, wherein a plurality of pieces of speech data whose start positions of non-speech regions differ are generated in such a manner that ~~A/D~~ analog-to-digital conversion is performed on the input signal at a predetermined sampling time interval, the speech signal is stored in sequence in a speech buffer in ~~the~~ an order of sampling, and ~~the~~ a position at which reading from the speech buffer starts is changed.

6. (Original) A method according to Claim 5, wherein said predetermined sampling time interval is for one piece of sampling data.

7. (Original) A method according to Claim 1, wherein a speech recognition engine is provided for each of a plurality of pieces of speech data whose start positions of non-speech regions differ, and the most numerous recognition results of each speech recognition engine is identified.

8. (Currently amended) A speech recognition device comprising:
a speech data generation section for generating, from speech data for which speech recognition is to be performed, a plurality of pieces of speech data whose start positions of non-speech regions differ;
a speech recognition engine for performing speech recognition on each of said pieces of speech data to obtain a plurality of recognized results; and
a recognized result selection section for selecting a most numerous recognized result from among the plurality of obtained recognized results.

9. (Currently amended) A speech recognition device according to Claim 8, wherein said speech data generation section generates a plurality of pieces of speech data whose start positions of non-speech regions differ, from speech data for which speech recognition is to be performed, by sequentially shifting the start positions of said non-speech region to a position preceding by a predetermined time from a start position of the speech region.

10. (Original) A speech recognition device according to Claim 9, wherein said predetermined position is a position preceding by a predetermined time from the start position of the speech region.

11. (Original) A speech recognition device according to Claim 8, wherein said speech recognition engine identifies said start position of the speech region.

12. (Currently amended) A speech recognition device according to Claim 10, wherein the information of said start position of the speech region is obtained by performing a recognition process on ~~the~~ a first speech data by using said speech

recognition engine, or is obtained by averaging data of speech data for several pieces of data from the start, which have been subjected to the recognition processing.

13. (Currently amended) A speech recognition device according to Claim 8, further comprising:

an ~~A/D~~ analog to digital converter for ~~A/D-converting~~ converting an input speech signal from analog to digital at a predetermined sampling time interval; and

a speech buffer for storing the ~~A/D-converted~~ converted speech data in an order of sampling,

wherein said speech data generation section generates a plurality of pieces of speech data whose start positions of non-speech regions differ, by changing the positions at which reading from the speech buffer starts.

14. (Original) A speech recognition device according to Claim 13, wherein said predetermined sampling time interval is for one piece of sampling data.

15. (Currently amended) A speech recognition device for improving speech recognition performance, said speech recognition device comprising:

a speech data generation section for generating, from speech data for which speech recognition is to be performed, a plurality of pieces of speech data whose start positions of non-speech regions differ;

a speech recognition engine, for performing speech recognition on the speech data, provided for each of a plurality of pieces of speech data whose start positions of non-speech regions differ in order to obtain a plurality of recognized results ; and

a recognized results section for selecting and providing as an output a most numerous recognized result from among the plurality of obtained recognized results.

16. (Currently amended) A speech recognition device according to Claim 15, wherein said speech data generation section generates, from speech data for which speech recognition is to be performed, a plurality of pieces of speech data whose start positions of non-speech regions differ, by sequentially shifting the start position of said non-speech region from a start position of the speech region back to a position preceding by a predetermined time.

17. (Currently amended) A speech recognition device according to Claim 15, further comprising:

an ~~A/D~~ analog to digital converter for ~~A/D-converting~~ converting an input speech signal from analog to digital at a predetermined sampling time interval; and

a speech buffer for storing the ~~A/D-converted~~ converted speech data in an order of sampling,

wherein said speech data generation section generates a plurality of pieces of speech data whose start positions of non-speech regions differ, by changing a reading position from the speech buffer, and provides the speech data to each speech recognition engine.

18. (Original) A speech recognition device according to Claim 17, wherein said predetermined sampling time interval is for one piece of sampling data.

19. (Currently amended) A speech recognition device according to Claim 15, wherein said speech recognition engine identifies a start position of the speech region.

20. (Currently amended) A speech recognition device according to Claim 19, wherein the information of the start position of said speech region is obtained by performing a recognition process on ~~the~~ a first speech data by using said speech recognition engine, or is obtained by averaging data of speech data for several pieces of data from the start, which have been subjected to the recognition process.